EFFICIENTLY ADAPTIVE DOUBLE PYRAMIDAL CODING

Abstract of the Disclosure

In accordance with an embodiment, a method of encoding includes generating for each transform point a double difference coefficient (comprising the difference between a modeled difference coefficient and a raw difference coefficient) and encoding as an adaptive difference coefficient for each transform point either the double difference coefficient or the raw difference coefficient. Whether the double difference coefficient or the raw difference coefficient is selected to be the adaptive difference coefficient depends on which one provides more efficient coding. A method of decoding includes receiving the adaptive difference coefficients from the encoder, applying the same modeling and transform as the encoder to generate the modeled difference coefficients, generating corrective difference coefficients (from the adaptive difference coefficients and the modeled coefficients), and inverse transformation using the corrective difference coefficients. A system may include an encoder implementing the method of encoding and a decoder implementing the method of decoding.